

ABSTRACT

A spring element (2) consists essentially of an elastic spring body (4) which is fixed between two rigid end parts (6, 8) arranged at a variable spacing from each other. The spring body (4) consisting of rubber or a rubber-type plastic has a rotationally symmetrical cross section, the longitudinal section shows a biconvex surface line. A U-shaped cross section is formed as a result of a cavity (10). The abrasion caused by the introduction of vertical and horizontal forces is to be reduced and an easy, horizontal slide is to be made possible. The surface (12) of the spring body (4) is provided with ribs (14; 14a, ...) that are arranged at spacings (A) from each other and are intersected by ribs (16; 16a, ...) or groups of ribs (16, ...) also arranged at spacings (A) from each other. Polygonal fields (18a, ...) are formed on the surface (12) of the spring body (4) in the gaps between the ribs (14,...; 16, ...) according to the angle of intersection. Instead of the ribbing, or in addition thereto, the spring body (4) and/or the surface of at least one of the end bodies (6 and/or 8) can be provided with a smooth surface. The ribs (14a, ...; 16a, ...) are preferably approximately 2 mm thick and approximately 10 mm apart. The spring element is especially used as an additional spring combined with a pneumatic spring in rail vehicles.